

### Status: Path 1 of [Dialog Information Services via Modem]

### Status: Initializing TCP/IP using (UseTelnetProto: 1 ServiceID pto-dialog)  
Trying 31060000009999...Open

DIALOG INFORMATION SERVICES

PLEASE LOGON:

\*\*\*\*\* HHHHHHHH SSSSSSSS?

### Status: Signing onto Dialog

\*\*\*\*\*

ENTER PASSWORD:

\*\*\*\*\* HHHHHHHH SSSSSSSS? \*\*\*\*\*

Welcome to DIALOG

### Status: Connected

Dialog level 02.18.00D

Last logoff: 15aug03 09:11:46

Logon file001 15aug03 09:20:17

KWIC is set to 50.

HIGHLIGHT set on as '\*'

\* \* \* \* See HELP NEWS 225 for information on new search prefixes  
and display codes

\*\*\*

\*\*\*

File 1:ERIC 1966-2003/Aug 13  
(c) format only 2003 The Dialog Corporation

Set	Items	Description
-----	-------	-------------

---	-----	-----
-----	-------	-------

Cost is in DialUnits

?b 155, 5, 73

15aug03 09:20:33 User259876 Session D533.1

\$0.30 0.085 DialUnits File1

\$0.30 Estimated cost File1

\$0.06 TELNET

\$0.36 Estimated cost this search

\$0.36 Estimated total session cost 0.085 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 155:MEDLINE(R) 1966-2003/Aug W2

(c) format only 2003 The Dialog Corp.

**\*File 155: Medline has been reloaded and accession numbers have  
changed. Please see HELP NEWS 155.**

File 5:BIOSIS Previews(R) 1969-2003/Aug W2

(c) 2003 BIOSIS

File 73:EMBASE 1974-2003/Aug W2

(c) 2003 Elsevier Science B.V.

**\*File 73: Alert feature enhanced for multiple files, duplicates  
removal, customized scheduling. See HELP ALERT.**

Set	Items	Description
-----	-------	-------------

---	-----	-----
-----	-------	-------

?s (hepatoblast) or (hepatic (w) (progenitor or precursor or stem))

72 HEPATOBLAST

399971 HEPATIC

62627 PROGENITOR

211602 PRECURSOR

315824 STEM

463 HEPATIC(W) ((PROGENITOR OR PRECURSOR) OR STEM)

S1 523 (HEPATOBLAST) OR (HEPATIC (W) (PROGENITOR OR PRECURSOR OR  
STEM))

```
?s (liver (w) (progenitor or precursor or stem)
>>>Unmatched parentheses
?s (liver (w) (progenitor or precursor or stem))
    1434035 LIVER
    62627 PROGENITOR
    211602 PRECURSOR
    315824 STEM
S2    640 (LIVER (W) (PROGENITOR OR PRECURSOR OR STEM))
?s s1 or s2
    523 S1
    640 S2
S3    1086 S1 OR S2
?s s3 and (cadaver or autopsy)
    1086 S3
    44289 CADAVER
    172593 AUTOPSY
S4    4 S3 AND (CADAVER OR AUTOPSY)
?rd
...completed examining records
S5    3 RD (unique items)
?t s5/3,k/all
```

**5/3,K/1 (Item 1 from file: 5)**  
 DIALOG(R)File 5:Biosis Previews(R)  
 (c) 2003 BIOSIS. All rts. reserv.

12909597 BIOSIS NO.: 200100116746  
**Adult \*liver\* \*stem\* cells: Bone marrow, blood, or liver derived?**  
 AUTHOR: Crosby H A; Strain A J(a)  
 AUTHOR ADDRESS: (a)Liver Research Labs, Queen Elizabeth Hospital,  
 Edgbaston, Birmingham, B15 2TH: a.j.strain@bham.ac.uk\*\*UK  
 JOURNAL: Gut 48 (2):p153-154 February, 2001  
 MEDIUM: print  
 ISSN: 0017-5749  
 DOCUMENT TYPE: Article  
 RECORD TYPE: Abstract  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English

**Adult \*liver\* \*stem\* cells: Bone marrow, blood, or liver derived?**

...ABSTRACT: shown in animal models that hepatocytes and cholangiocytes can  
 derive from bone marrow cells. We have investigated whether such a  
 process occurs in humans. Archival \*autopsy\* and biopsy liver specimens  
 were obtained from 2 female recipients of therapeutic bone marrow  
 transplantations with male donors and from 4 male recipients of  
 orthotopic...

DESCRIPTORS:  
 ...ORGANISMS: PARTS ETC: \*liver\* \*stem\* cells

**5/3,K/2 (Item 2 from file: 5)**  
 DIALOG(R)File 5:Biosis Previews(R)  
 (c) 2003 BIOSIS. All rts. reserv.

11700576 BIOSIS NO.: 199800482307  
**Primary liver tumour of intermediate (hepatocyte-bile duct cell) phenotype:  
 A progenitor cell tumour?**  
 AUTHOR: Robrechts C; De Vos R; Van Den Heuvel M; Van Cutsem E; Van Damme B;  
 Desmet V; Roskams T(a)  
 AUTHOR ADDRESS: (a)Dep. Pathol., Univ. Leuven, Minderbroedersstraat 12,  
 B-3000 Leuven\*\*Belgium  
 JOURNAL: Liver 18 (4):p288-293 Aug., 1998  
 ISSN: 0106-9543  
 DOCUMENT TYPE: Article  
 RECORD TYPE: Abstract  
 LANGUAGE: English

...ABSTRACT: one hand and bile duct cell features on the other hand. Nine days after admission, the patient died due to liver failure and hepatic encephalopathy. \*Autopsy\* excluded another primary tumour site. Overall, this tumour was a primary liver tumour with an intermediate phenotype and with a very rapid clinical course. The...

DESCRIPTORS:

...ORGANISMS: PARTS ETC: \*liver\* \*progenitor\* cell

5/3,K/3 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

10543135 EMBASE No: 2000008374

**Intrauterine transplantation of fetal \*liver\* \*stem\* cells for the treatment of beta-thalassemia and immunodeficiency diseases**

Touraine J.-L.

J.-L. Touraine, Dept. of Transplant./Clin. Immunol., Claude Bernard University, Lyon France

Reviews in Clinical and Experimental Hematology ( REV. CLIN. EXP.

HEMATOL. ) (United Kingdom) 1999, 8/1-4 (33-48)

CODEN: RCEHF ISSN: 1365-151X

DOCUMENT TYPE: Journal; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 52

**Intrauterine transplantation of fetal \*liver\* \*stem\* cells for the treatment of beta-thalassemia and immunodeficiency diseases**

...the prenatal, in utero application of stem cell transplants to treat severe genetic disorders of the human fetus. Six patients have been transplanted with fetal \*liver\* \*stem\* cells. Recipient ages ranged from 12 to 28 weeks postfertilization, donor ages from 7 to 14 weeks postfertilization. The first patient had bare lymphocyte syndrome...

...this treatment and was cured from severe combined immunodeficiency in 1989. She had 80% donor-derived lymphocytes, but unfortunately died one month ago following a \*cadaver\* liver transplant which was done to treat a sclerosing cholangitis. A third patient, without immunodeficiency, received the transplant at 12 weeks postfertilization, to treat beta0...

?ds

Set	Items	Description
S1	523	(HEPATOBLAST) OR (HEPATIC (W) (PROGENITOR OR PRECURSOR OR - STEM))
S2	640	(LIVER (W) (PROGENITOR OR PRECURSOR OR STEM))
S3	1086	S1 OR S2
S4	4	S3 AND (CADAVER OR AUTOPSY)
S5	3	RD (unique items)
?s s2 and (adult)		
	640	S2
	4603629	ADULT
S6	178	S2 AND (ADULT)
?s s6 and (heart (w) beating)		
	178	S6
	1681150	HEART
	17413	BEATING
	1909	HEART(W) BEATING
S7	0	S6 AND (HEART (W) BEATING)
?s s6 and (isolation or purification or processing or harvesting)		
	178	S6
	884520	ISOLATION
	727904	PURIFICATION
	441169	PROCESSING
	31467	HARVESTING
S8	10	S6 AND (ISOLATION OR PURIFICATION OR PROCESSING OR HARVESTING)

?rd

...completed examining records

S9 8 RD (unique items)

?t s9/3,k/all

9/3,K/1 (Item 1 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

14360669 22387521 PMID: 12500199

**Characterization of cell types during rat liver development.**

Fiegel Henning C; Park Jonas J h; Lioznov Michael V; Martin Andreas; Jaeschke-Melli Stefan; Kaufmann Peter M; Fehse Boris; Zander Axel R; Kluth Dietrich; et al

Department of Pediatric Surgery, University Hospital Eppendorf, Hamburg, Germany. fiegel@uke.uni-hamburg.de

Hepatology (Baltimore, Md.) (United States) Jan 2003, 37 (1) p148-54

, ISSN 0270-9139 Journal Code: 8302946

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Hepatic stem cells have been identified in \*adult\* liver. Recently, the origin of hepatic progenitors and hepatocytes from bone marrow was demonstrated. Hematopoietic and hepatic stem cells share the markers CD 34, c-kit, and Thyl. Little is known about \*liver\* \*stem\* cells during liver development. In this study, we investigated the potential stem cell marker Thyl and hepatocytic marker CK-18 during liver development to identify putative fetal \*liver\* \*stem\* cell candidates. Livers were harvested from embryonic and fetal day (ED) 16, ED 18, ED 20, and neonatal ED 22 stage rat fetuses from Sprague...

... cells (CK-18 positive) in fetal rat liver express Thyl. Other progenitors express only CK-18. This indicates the coexistence of different hepatic cell compartments. \*Isolation\* and further characterization of such cells is needed to demonstrate their biologic properties.

9/3,K/2 (Item 2 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

09600382 21384684 PMID: 11493271

**\*Liver\* \*stem\* cells: a potential source of hepatocytes for the treatment of human liver disease.**

Faris R A; Konkin T; Halpert G

Department of Pediatric Oncology Research, Rhode Island Hospital, 593 Eddy Street, Providence, RI 02903, U.S.A. Ronald Faris@brown.edu

Artificial organs (United States) Jul 2001, 25 (7) p513-21, ISSN 0160-564X Journal Code: 7802778

Contract/Grant No.: RO1 CA60005; CA; NCI

Comment in Artif Organs. 2001 Jul;25(7) 509-12; Comment in PMID 11493270

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**\*Liver\* \*stem\* cells: a potential source of hepatocytes for the treatment of human liver disease.**

... differentiate along hepatocytic and biliary lineages. Because oval cells proliferate only when hepatocyte replication is impaired, they are considered to be the progeny of facultative \*liver\* \*stem\* cells (FLSCs). Identification and \*isolation\* of FLSCs has been hampered by the lack of markers that delineate these bipotential progenitors. We hypothesized that transition ductal cells are FLSCs because they...

... differentiate along the hepatic lineage following colonization of the liver. The intent of this review is to provide insight into the nature and origin of \*liver\* \*stem\* cells and to explore the possibility that stem cell technology may lead to the development of clinical modalities for the treatment of human liver disease.

; \*Adult\*; Cell Division--physiology--PH; Cell Transplantation--methods--MT; Graft Rejection; Graft Survival; Hepatocytes--transplantation--TR; Rats; Sensitivity and Specificity; Stem Cells--physiology--PH

9/3,K/3 (Item 3 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

08233687 94299642 PMID: 8027180

**Expression of hepatic transcription factors during liver development and oval cell differentiation.**

Nagy P; Bisgaard H C; Thorgeirsson S S

Laboratory of Experimental Carcinogenesis, National Cancer Institute, Bethesda, Maryland 20892-0037.

Journal of cell biology (UNITED STATES) Jul 1994, 126 (1) p223-33, ISSN 0021-9525 Journal Code: 0375356

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

The oval cells are thought to be the progeny of a \*liver\* \*stem\* cell compartment and strong evidence now exists indicating that these cells can participate in liver regeneration by differentiating into different hepatic lineages. To better understand...

... transcriptional factors gradually decrease during the late period of embryonic liver development while three factors (HNF1 beta, HNF3 beta, and DBP) increase. In the normal \*adult\* rat liver the expression of all the transcription factors are restricted to the hepatocytes. However, during early stages of oval cell proliferation both small and...

; Blotting, Northern; CCAAT-Enhancer-Binding Proteins; Cell Differentiation; Cell Division; DNA-Binding Proteins--genetics--GE; DNA-Binding Proteins--\*isolation\* and \*purification\*--IP; In Situ Hybridization; Liver--anatomy and histology--AH; Liver--embryology--EM; Liver Regeneration; Nuclear Proteins--genetics--GE; Nuclear Proteins--\*isolation\* and \*purification\*--IP; Rats; Stem Cells--cytology--CY; Transcription Factors--genetics--GE; Transcription Factors--\*isolation\* and \*purification\*--IP; Up-Regulation

9/3,K/4 (Item 4 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

04439536 84081891 PMID: 6690044

**Isozyme profiles of oval cells, parenchymal cells, and biliary cells isolated by centrifugal elutriation from normal and preneoplastic livers.**

Hayner N T; Braun L; Yaswen P; Brooks M; Fausto N

Cancer research (UNITED STATES) Jan 1984, 44 (1) p332-8, ISSN 0008-5472 Journal Code: 2984705R

Contract/Grant No.: CA 23226; CA; NCI; GM 07601; GM; NIGMS

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

The fetal liver isozymes aldolase A and pyruvate kinase K increase in livers of \*adult\* rats fed a choline deficient-diet containing 0.1% ethionine. Oval cells isolated by centrifugal elutriation from preneoplastic livers of animals receiving the carcinogenic diet contained

these fetal forms as well as fetal-\*adult\* isozyme hybrids. In contrast, parenchymal cells isolated from the livers of these animals had only aldolase B and pyruvate kinase L, the same isozymes present in parenchymal cells of normal \*adult\* rats. Liver homogenates from rats receiving the carcinogenic diet contain lactate dehydrogenase (LDH) 1, LDH 2, and LDH 3 in addition to LDH 4 and...

... isolated from normal and preneoplastic livers. Cells of biliary epithelium from normal livers also contain aldolase A and pyruvate kinase K, but not the fetal-\*adult\* isozymes present in oval cell populations. The results indicate that, in animals receiving this carcinogenic diet, isozyme alterations associated with neoplasia result from the proliferation...

... cell population which contains these enzymes and not from "dedifferentiation" of mature hepatocytes. Furthermore, the data suggest that this new cell population may include a \*liver\* \*stem\* cell compartment containing cells in transitional states of differentiation.

; Choline Deficiency--enzymology--EN; Fructose-Bisphosphate Aldolase--\*isolation\* and \*purification\*--IP; Isoenzymes--\*isolation\* and \*purification\*--IP; Lactate Dehydrogenase--\*isolation\* and \*purification\*--IP; Molecular Weight; Pyruvate Kinase--\*isolation\* and \*purification\*--IP; Rats; Rats, Inbred Strains

9/3,K/5 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2003 BIOSIS. All rts. reserv.

13974699 BIOSIS NO.: 200200603520  
**\*Isolation\* of hematopoietic and \*liver\* \*stem\* cells using FACS.**  
AUTHOR: Nakauchi Hiromitsu  
JOURNAL: Cytometry Supplement (11):p38 2002  
MEDIUM: print  
CONFERENCE/MEETING: XXI Congress of the International Society for Analytical Cytology San Diego, CA, USA May 04-09, 2002  
SPONSOR: International Society for Analytical Cytology  
ISSN: 1046-7386  
RECORD TYPE: Citation  
LANGUAGE: English

**\*Isolation\* of hematopoietic and \*liver\* \*stem\* cells using FACS.**  
DESCRIPTORS:  
...ORGANISMS: \*adult\*  
...ORGANISMS: PARTS ETC: blood and lymphatics, \*isolation\*; ...  
...\*liver\* \*stem\* cells...  
...digestive system, \*isolation\*

9/3,K/6 (Item 1 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2003 Elsevier Science B.V. All rts. reserv.

11543766 EMBASE No: 2002116685  
**Generation and characterization of p53 null transformed hepatic progenitor cells: Oval cells give rise to hepatocellular carcinoma**  
Dumble M.L.; Croager E.J.; Yeoh G.C.T.; Quail E.A.  
E.A. Quail, Department of Biochemistry, The University of Western Australia, Crawley, WA 6009 Australia  
AUTHOR EMAIL: equail@cyllene.uwa.edu.au  
Carcinogenesis ( CARCINOGENESIS ) (United Kingdom) 2002, 23/3 (435-445)  
CODEN: CRNGD ISSN: 0143-3334  
DOCUMENT TYPE: Journal ; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 60

Oval cells are bipotent **\*liver\* \*stem\*** cells able to differentiate into hepatocytes and bile duct epithelia. In normal **\*adult\*** liver oval cells are quiescent, existing in low numbers around the periportal region, and proliferate following severe, prolonged liver trauma. There is evidence implicating oval...

MEDICAL DESCRIPTORS:

...bile duct; epithelium cell; cell count; disease severity; liver injury; cell immortalization; cell lineage; liver carcinogenesis; knockout mouse; cell cycle; diet supplementation; wild type; cell **\*isolation\***; centrifugation; cell culture; phenotype; cell growth; carcinogenicity; gene expression; Northern blotting; immunocytochemistry; gene deletion; nonhuman; male; female; mouse; controlled study; animal cell; article; priority journal

9/3,K/7 (Item 2 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

11474016 EMBASE No: 2002045548

**Derivation, characterization, and phenotypic variation of hepatic progenitor cell lines isolated from **\*adult\*** rats**

Yin L.; Sun M.; Ilic Z.; Leffert H.L.; Sell S.

Dr. S. Sell, Department of Pathology, Laboratory of Medicine, Albany Medical College, 47 New Scotland Ave., Albany, NY 12208 United States

AUTHOR EMAIL: sells@mail.amc.edu

Hepatology ( HEPATOLOGY ) (United States) 2002, 35/2 (315-324)

CODEN: HPTLD ISSN: 0270-9139

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 50

**Derivation, characterization, and phenotypic variation of hepatic progenitor cell lines isolated from **\*adult\*** rats**

**\*Liver\* \*progenitor\*** cells (LPCs) cloned from **\*adult\*** rat livers following allyl alcohol injury express hematopoietic stem cell and early hepatic lineage markers when cultured on feeder layers; under these conditions, neither mature...

MEDICAL DESCRIPTORS:

**\*phenotype; \*precursor cell; \*cell \*isolation\*; \*liver cell; \*liver injury --etiology--et**

9/3,K/8 (Item 3 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

06667786 EMBASE No: 1996332667

**Growth and differentiation in culture of clonogenic hepatocytes that express both phenotypes of hepatocytes and biliary epithelial cells**

Tateno C.; Yoshizato K.

Yoshizato MorphoMatrix Project, ERATO, Research Development Corp. of Japan, 3-13-26, Kagamiyama, Higashihiroshima, Hiroshima 739 Japan

American Journal of Pathology ( AM. J. PATHOL. ) (United States) 1996, 149/5 (1593-1605)

CODEN: AJPAA ISSN: 0002-9440

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

A cell fraction containing small hepatocytes and nonparenchymal cells was isolated from the **\*adult\*** rat liver and was cultured in the presence of vitamin C, epidermal growth factor, nicotinamide, and dimethylsulfoxide. All of the small hepatocytes that had attached...

...addition, cells were identified that ceased to express albumin and in turn were positive for CK19 or CK7. Therefore, the colony was considered to

contain \*liver\* \*progenitor\*-like cells that can differentiate during culture into cells expressing phenotypes of mature hepatocytes or biliary epithelial cells.

MEDICAL DESCRIPTORS:

animal cell; article; cell \*isolation\*; cell proliferation; colony formation; culture medium; immunocytochemistry; labeling index; liver parenchyma; liver regeneration; nonhuman; phenotype; precursor cell; priority journal; rat; stellate cell  
?ds

Set	Items	Description
S1	523	(HEPATOBLAST) OR (HEPATIC (W) (PROGENITOR OR PRECURSOR OR - STEM))
S2	640	(LIVER (W) (PROGENITOR OR PRECURSOR OR STEM))
S3	1086	S1 OR S2
S4	4	S3 AND (CADAVER OR AUTOPSY)
S5	3	RD (unique items)
S6	178	S2 AND (ADULT)
S7	0	S6 AND (HEART (W) BEATING)
S8	10	S6 AND (ISOLATION OR PURIFICATION OR PROCESSING OR HARVEST-ING)
S9	8	RD (unique items)

?logout

15aug03 09:29:08 User259876 Session D533.2

\$2.35	0.734 DialUnits	File155
\$0.84	4 Type(s) in Format	3
\$0.84	4 Types	
\$3.19	Estimated cost	File155
\$3.09	0.552 DialUnits	File5
\$5.25	3 Type(s) in Format	3
\$5.25	3 Types	
\$8.34	Estimated cost	File5
\$5.01	0.542 DialUnits	File73
\$10.20	4 Type(s) in Format	3
\$10.20	4 Types	
\$15.21	Estimated cost	File73
	OneSearch, 3 files,	1.828 DialUnits FileOS
\$2.10	TELNET	
\$28.84	Estimated cost this search	
\$29.20	Estimated total session cost	1.914 DialUnits

### Status: Signed Off. (9 minutes)